



6560-50-P

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 52**

**[EPA-R06-OAR-2015-0189; FRL-9973-61-OAR]**

**Approval and Promulgation of Air Quality Implementation Plans; State of Arkansas;  
Regional Haze and Interstate Visibility Transport Federal Implementation Plan Revisions;  
Withdrawal of Federal Implementation Plan for NO<sub>x</sub> for Electric Generating Units in  
Arkansas**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is amending a Federal Implementation Plan (FIP) that addresses regional haze for the first planning period for Arkansas that was published in the Federal Register on September 27, 2016, as it applies to the nitrogen oxide (NO<sub>x</sub>) requirements for the Arkansas Electric Cooperative Corporation (AECC) Bailey Plant Unit 1; AECC McClellan Plant Unit 1; the American Electric Power/Southwestern Electric Power Company (AEP/SWEPCO) Flint Creek Plant Boiler No. 1; Entergy Arkansas, Inc. (Entergy) Lake Catherine Plant Unit 4; Entergy White Bluff Plant Units 1 and 2 and the Auxiliary Boiler; and Entergy Independence Plant Units 1 and 2. We are removing these FIP requirements because in a separate action being published in this **Federal Register**, we are taking final action to approve revisions to the Arkansas State Implementation Plan (SIP) submitted by the State of Arkansas through the Arkansas Department of Environmental Quality (ADEQ) on October 31, 2017, that address NO<sub>x</sub> requirements for the nine aforementioned units.

**DATES:** This final rule will be effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** The EPA has established a docket for this action under Docket No. EPA-R06-OAR-2015-0189. All documents in the dockets are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, *e.g.*, Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the EPA Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202-2733.

**FOR FURTHER INFORMATION CONTACT:** Dayana Medina, (214) 665-7241; [medina.dayana@epa.gov](mailto:medina.dayana@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document wherever “we,” “us,” or “our” is used, we mean the EPA.

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### **I. What is the Background for this Action?**

Arkansas submitted a SIP revision on September 9, 2008, to address the first regional haze implementation period. On August 3, 2010, Arkansas submitted a SIP revision with non-

substantive revisions to the Arkansas Pollution Control and Ecology Commission (APCEC) Regulation 19, Chapter 15; this Chapter identified the BART-eligible and subject-to-BART sources in Arkansas and established the BART emission limits for subject-to-BART sources. On September 27, 2011, the State submitted supplemental information to address the regional haze requirements. We are hereafter referring to these regional haze submittals collectively as the “2008 Arkansas Regional Haze SIP.” On March 12, 2012, we partially approved and partially disapproved the 2008 Arkansas Regional Haze SIP.<sup>1</sup> On September 27, 2016, we published a FIP (the Arkansas Regional Haze FIP) addressing the disapproved portions of the 2008 Arkansas Regional Haze SIP.<sup>2</sup> Among other things, the FIP established NO<sub>x</sub> emission limits under the BART requirements for Bailey Unit 1; McClellan Unit 1; Flint Creek Boiler No. 1; Lake Catherine Unit 4; and White Bluff Units 1 and 2 and the Auxiliary Boiler. The FIP also established NO<sub>x</sub> emission limits under the reasonable progress requirements for Independence Units 1 and 2.

In response to petitions submitted by the State of Arkansas and industry parties seeking reconsideration and an administrative stay of the final Arkansas Regional Haze FIP,<sup>3</sup> in a letter dated April 14, 2017, we announced the convening of a proceeding to reconsider several elements of the FIP, including the appropriate compliance dates for the NO<sub>x</sub> emission limits for Flint Creek Unit 1, White Bluff Units 1 and 2, and Independence Units 1 and 2.<sup>4</sup> EPA also published a document in the Federal Register on April 25, 2017, administratively staying the

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<sup>1</sup> 77 FR 14604.

<sup>2</sup> 81 FR 66332; see also 81 FR 68319 (October 4, 2016) (correction).

<sup>3</sup> See the docket associated with this proposed rulemaking for a copy of the petitions for reconsideration and administrative stay submitted by the State of Arkansas; Entergy Arkansas Inc., Entergy Mississippi Inc., and Entergy Power LLC (collectively “Entergy”); AECC; and the Energy and Environmental Alliance of Arkansas (EEAA).

<sup>4</sup> Letter from E. Scott Pruitt, Administrator, EPA, to Nicholas Jacob Bronni & Jamie Leigh Ewing, Arkansas Attorney General’s Office, (April 14, 2017). A copy of this letter is included in the docket, <https://www.regulations.gov/document?D=EPA-R06-OAR-2015-0189-0240>.

effectiveness of the 18-month NO<sub>x</sub> compliance dates in the FIP for these units for a period of 90 days.<sup>5</sup> On July 13, 2017, the EPA published a proposed rule that would extend the FIP's NO<sub>x</sub> compliance dates for Flint Creek Unit 1, White Bluff Units 1 and 2, and Independence Units 1 and 2, by 21 months to January 27, 2020.<sup>6,7</sup>

On July 12, 2017, Arkansas submitted a proposed SIP revision with a request for parallel processing, addressing the NO<sub>x</sub> requirements for Bailey Unit 1, McClellan Unit 1, Flint Creek Boiler No. 1, Lake Catherine Unit 4, White Bluff Units 1 and 2 and the Auxiliary Boiler, and Independence Units 1 and 2 (Arkansas Regional Haze NO<sub>x</sub> SIP revision or Arkansas NO<sub>x</sub> SIP revision). Arkansas' proposed July 2017 Regional Haze NO<sub>x</sub> SIP revision addressed the NO<sub>x</sub> BART requirements for Arkansas' EGUs by relying on participation in the Cross State Air Pollution Rule (CSAPR) ozone season NO<sub>x</sub> trading program as an alternative to BART. The July 2017 Regional Haze NO<sub>x</sub> SIP revision proposal also made the determination that no additional NO<sub>x</sub> emission controls for Arkansas sources, beyond participation in CSAPR's ozone season NO<sub>x</sub> trading program, are required for achieving reasonable progress in Arkansas. The July 2017 Regional Haze SIP revision addresses NO<sub>x</sub> requirements for the same EGUs for which we established source-specific NO<sub>x</sub> emission limits in the September 27, 2016 FIP. In a document published in the Federal Register on September 11, 2017, we proposed to approve the Arkansas Regional Haze NO<sub>x</sub> SIP revision and proposed to withdraw corresponding parts of the FIP.<sup>8</sup> On October 31, 2017, we received ADEQ's final NO<sub>x</sub> SIP revision addressing BART and reasonable progress requirements for NO<sub>x</sub> for EGUs in Arkansas for the first implementation

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<sup>5</sup> 82 FR 18994.

<sup>6</sup> 82 FR 32284.

<sup>7</sup> EPA has not finalized the July 13, 2017 proposed rule. The separate final action approving the Arkansas Regional Haze NO<sub>x</sub> SIP revision together with this final action EPA is taking to withdraw the source-specific NO<sub>x</sub> emission limits for the nine EGUs in the Arkansas Regional Haze FIP, make it unnecessary to finalize our July 13, 2017 proposed rule to revise the NO<sub>x</sub> compliance dates in the Arkansas Regional Haze FIP.

<sup>8</sup> 82 FR 42627.

period. In a final action being published separately in this Federal Register, we are taking final action to approve the Arkansas Regional Haze NO<sub>x</sub> SIP revision.

The background for this final rule and the separate action also being published in this Federal Register that approves the Arkansas Regional Haze NO<sub>x</sub> SIP revision is also discussed in detail in our September 11, 2017 proposal.<sup>9</sup> The comment period was open for 30 days, and we received comments from three commenters in response to our proposed action.

## **II. What Final Action is EPA Taking?**

We are withdrawing those portions of the Arkansas Regional Haze FIP at 40 CFR 52.173 that impose NO<sub>x</sub> requirements on Bailey Unit 1; McClellan Unit 1; Flint Creek Boiler No. 1; Lake Catherine Unit 4; White Bluff Units 1 and 2 and the Auxiliary Boiler; and Independence Units 1 and 2. Therefore, as of the effective date of this final rule, the Arkansas Regional Haze FIP NO<sub>x</sub> requirements will no longer apply to the nine aforementioned units. All other provisions of the Arkansas Regional Haze FIP are unaffected by this action and remain in place.

As explained in our September 11, 2017 proposal,<sup>10</sup> this action is made possible because of our separate action being published in this **Federal Register** to approve the Arkansas Regional Haze NO<sub>x</sub> SIP revision submitted to us on July 12, 2017, with a request for parallel processing. On October 31, 2017, we received ADEQ's final SIP revision addressing NO<sub>x</sub> BART for EGUs in Arkansas and the reasonable progress requirements for NO<sub>x</sub> for the first implementation period. The final Arkansas Regional Haze NO<sub>x</sub> SIP revision we received on October 31, 2017, did not contain significant changes from the state's proposed SIP revision. Therefore, it is appropriate for us to take final action, as proposed, on the final SIP revision.

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<sup>9</sup> 82 FR 42627.

<sup>10</sup> 82 FR 42627.

EPA has made the determination that the Arkansas Regional Haze NO<sub>x</sub> SIP revision is approvable because the plan's provisions meet all applicable requirements of the CAA and EPA implementing regulations. EPA is finalizing this action under section 110 and part C of the Act.

### **III. Responses to Comments Received**

We received a total of three comment letters concerning our proposed action. The issues raised in those comment letters are summarized, along with our response to each, in the separate document being published in this **Federal Register** that approves the Arkansas Regional Haze NO<sub>x</sub> SIP revision. Copies of the comments are available in the docket for this rulemaking.<sup>11</sup>

### **V. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <http://www2.epa.gov/lawsregulations/laws-and-executive-orders>.

#### *A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review*

This action is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for review. This final rule revises a FIP to withdraw source-specific NO<sub>x</sub> emission limits for only six facilities in Arkansas and is therefore not a rule of general applicability.

#### *B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs*

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

#### *C. Paperwork Reduction Act (PRA)*

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<sup>11</sup> Please see Docket No. EPA-R06-OAR-2015-0189 in the regulations.gov Web site.

This action does not impose an information collection burden under the provisions of the PRA. Burden is defined at 5 CFR 1320.3(b). This final rule revises a FIP to withdraw source-specific NO<sub>x</sub> emission limits for six facilities in Arkansas.

*D. Regulatory Flexibility Act (RFA)*

I certify that this final action will not have a significant economic impact on a substantial number of small entities under the RFA. This final action will not impose any requirements on small entities. This final action revises a FIP to withdraw source-specific NO<sub>x</sub> emission limits that apply to six power plants in Arkansas.

*E. Unfunded Mandates Reform Act (UMRA)*

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action does not impose additional requirements beyond those imposed by state law. Accordingly, no additional costs to State, local, or tribal governments, or to the private sector, will result from this action.

*F. Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

*G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications, as specified in Executive Order 13175, because this partial FIP withdrawal does not apply on any Indian reservation land or in any other area where the EPA or an Indian tribe has demonstrated that a tribe has jurisdiction, and will not impose substantial direct costs on tribal governments or preempt tribal law. This final action

revises a FIP to withdraw source-specific NO<sub>x</sub> emission limits that apply to six power plants in Arkansas. There are no Indian reservation lands in Arkansas. Thus, Executive Order 13175 does not apply to this action.

*H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks*

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

*I. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use*

This action is not subject to Executive Order 13211, because it is not a significant regulatory action under Executive Order 12866.

*J. National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

*K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations*

The EPA believes the human health or environmental risk addressed by this action will not have potentially disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations.

*L. Determination Under Section 307(d)*



Pursuant to CAA section 307(d)(1)(B), this action is subject to the requirements of CAA section 307(d), as it revises a FIP under CAA section 110(c).

*M. Congressional Review Act (CRA)*

This rule is exempt from the CRA because it is a rule of particular applicability. EPA is not required to submit a rule report regarding this action under section 801 because this is a rule of particular applicability that only affects six facilities in Arkansas.

*N. Petitions for Judicial Review*

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

**List of Subjects in 40 CFR Part 52**

Air pollution control, Best available retrofit technology, Environmental protection, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Regional haze, Reporting and recordkeeping requirements, Visibility.

Dated: January 25, 2018.

E. Scott Pruitt,  
Administrator.

Title 40, chapter I, of the Code of Federal Regulations is amended as follows:

**PART 52—APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS**

1. The authority citation for part 52 continues to read as follows:

**Authority:** 42 U.S.C. 7401 *et seq.*

**Subpart E—Arkansas**

2. Section 52.173 is amended by:

- a. Revising paragraphs (c)(3) through (10) and (12);
- b. Removing paragraphs (c)(13) and (14);
- c. Redesignating paragraphs (c)(15) through (29) as paragraphs (c)(13) through (27); and
- d. Revising newly redesignated paragraphs (c)(14), (15), (17), (18), and (20) through (24).

The revisions read as follows:

**§52.173 Visibility protection.**

\* \* \* \* \*

(c) \* \* \*

(3) *Emissions limitations for AECC Bailey Unit 1 and AECC McClellan Unit 1.* The individual SO<sub>2</sub> and PM emission limits for each unit are as listed in the table in this paragraph (c)(3).

Unit	SO <sub>2</sub> Emission Limit	PM Emission Limit
AECC Bailey Unit 1	Use of fuel with a sulfur content limit of 0.5% by weight.	Use of fuel with a sulfur content limit of 0.5% by weight.
AECC McClellan Unit 1	Use of fuel with a sulfur content limit of 0.5% by weight.	Use of fuel with a sulfur content limit of 0.5% by weight.

(4) *Compliance dates for AECC Bailey Unit 1 and AECC McClellan Unit 1.* The owner or operator of each unit must comply with the SO<sub>2</sub> and PM requirements listed in paragraph (c)(3) of this section by October 27, 2021. As of October 27, 2016, the owner or operator of each unit shall not purchase fuel for combustion at the unit that does not meet the sulfur content limit in paragraph (c)(3) of this section. The owner or operator of each unit must comply with the requirement in paragraph (c)(3) of this section to burn only fuel with a sulfur content limit of 0.5% by weight by October 27, 2021.

(5) *Compliance determination and reporting and recordkeeping requirements for AECC Bailey Unit 1 and AECC McClellan Unit 1 for SO<sub>2</sub> and PM.* To determine compliance with the SO<sub>2</sub> and PM requirements listed in paragraph (c)(3) of this section, the owner or operator shall sample and analyze each shipment of fuel to determine the sulfur content by weight, except for natural gas shipments. A “shipment” is considered delivery of the entire amount of each order of fuel purchased. Fuel sampling and analysis may be performed by the owner or operator of an affected unit, an outside laboratory, or a fuel supplier. All records pertaining to the sampling of each shipment of fuel as described in this paragraph (c)(5), including the results of the sulfur content analysis, must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives.

(6) *Emissions limitations for AEP Flint Creek Unit 1 and Entergy White Bluff Units 1 and 2.* The individual SO<sub>2</sub> emission limits for each unit are as listed in the table in this paragraph (c)(6), as specified in pounds per million British thermal units (lb/MMBtu). The SO<sub>2</sub> emission limits of 0.06 lb/MMBtu are on a rolling 30 boiler-operating-day averaging period.

Unit	SO <sub>2</sub> Emission Limit (lb/MMBtu)
AEP Flint Creek Unit 1	0.06
Entergy White Bluff Unit 1	0.06

Entergy White Bluff Unit 2	0.06
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*(7) Compliance dates for AEP Flint Creek Unit 1 and Entergy White Bluff Units 1 and 2.*

The owner or operator of AEP Flint Creek Unit 1 must comply with the SO<sub>2</sub> emission limit listed in paragraph (c)(6) of this section by April 27, 2018. The owner or operator of White Bluff Units 1 and 2 must comply with the SO<sub>2</sub> emission limit listed in paragraph (c)(6) of this section by October 27, 2021.

*(8) Compliance determination and reporting and recordkeeping requirements for AEP Flint Creek Unit 1 and Entergy White Bluff Units 1 and 2.* (i) For purposes of determining compliance with the SO<sub>2</sub> emission limit listed in paragraph (c)(6) of this section for AEP Flint Creek Unit 1 and with the SO<sub>2</sub> emission limits listed in paragraph (c)(6) of this section for White Bluff Units 1 and 2, the emissions for each boiler-operating-day for each unit shall be determined by summing the hourly emissions measured in pounds of SO<sub>2</sub>. For each unit, heat input for each boiler-operating-day shall be determined by adding together all hourly heat inputs, in millions of BTU. Each boiler-operating-day of the 30-day rolling average for a unit shall be determined by adding together the pounds of SO<sub>2</sub> from that day and the preceding 29 boiler-operating-days and dividing the total pounds of SO<sub>2</sub> by the sum of the heat input during the same 30 boiler-operating-day period. The result shall be the 30 boiler-operating-day rolling average in terms of lb/MMBtu emissions of SO<sub>2</sub>. If a valid SO<sub>2</sub> pounds per hour or heat input is not available for any hour for a unit, that heat input and SO<sub>2</sub> pounds per hour shall not be used in the calculation of the 30 boiler-operating-day rolling average for SO<sub>2</sub>. For each day, records of the total SO<sub>2</sub> emitted that day by each emission unit and the sum of the hourly heat inputs for that day must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. Records of the 30 boiler-operating-day rolling average for SO<sub>2</sub> for each unit as

described in this paragraph (c)(8)(i) must be maintained by the owner or operator for each boiler-operating-day and made available upon request to EPA and ADEQ representatives.

(ii) The owner or operator shall continue to maintain and operate a CEMS for SO<sub>2</sub> on the units listed in paragraph (c)(6) of this section in accordance with 40 CFR 60.8 and 60.13(e), (f), and (h), and appendix B of 40 CFR part 60. The owner or operator shall comply with the quality assurance procedures for CEMS found in 40 CFR part 75. Compliance with the emission limits for SO<sub>2</sub> shall be determined by using data from a CEMS.

(iii) Continuous emissions monitoring shall apply during all periods of operation of the units listed in paragraph (c)(6) of this section, including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments. Continuous monitoring systems for measuring SO<sub>2</sub> and diluent gas shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Hourly averages shall be computed using at least one data point in each fifteen-minute quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant in an hour) if data are unavailable as a result of performance of calibration, quality assurance, preventive maintenance activities, or backups of data from data acquisition and handling system, and recertification events. When valid SO<sub>2</sub> pounds per hour emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments, emission data must be obtained by using other monitoring systems approved by the EPA to provide emission data for a minimum of 18 hours in each 24-hour period and at least 22 out of 30 successive boiler operating days.

(9) *Emissions limitations for Entergy White Bluff Auxiliary Boiler.* The individual SO<sub>2</sub> and PM emission limits for the unit are as listed in the table in this paragraph (c)(9) in pounds per hour (lb/hr).

Unit	SO <sub>2</sub> Emission limit (lb/hr)	PM Emission limit (lb/hr)
Entergy White Bluff Auxiliary Boiler	105.2	4.5

(10) *Compliance dates for Entergy White Bluff Auxiliary Boiler.* The owner or operator of the unit must comply with the SO<sub>2</sub> and PM emission limits listed in paragraph (c)(9) of this section by October 27, 2016.

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(12) *Emissions limitations for Entergy Lake Catherine Unit 4.* The unit must not burn fuel oil until BART determinations are promulgated for the unit for SO<sub>2</sub> and PM for the fuel oil firing scenario through a FIP and/or through EPA action upon and approval of revised BART determinations submitted by the State as a SIP revision.

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(14) *Compliance dates for Domtar Ashdown Mill Power Boiler No. 1.* The owner or operator of the boiler must comply with the SO<sub>2</sub> and NO<sub>x</sub> emission limits listed in paragraph (c)(13) of this section by November 28, 2016.

(15) *Compliance determination and reporting and recordkeeping requirements for Domtar Ashdown Paper Mill Power Boiler No. 1.* (i)(A) SO<sub>2</sub> emissions resulting from combustion of fuel oil shall be determined by assuming that the SO<sub>2</sub> content of the fuel delivered to the fuel inlet of the combustion chamber is equal to the SO<sub>2</sub> being emitted at the stack. The owner or operator must maintain records of the sulfur content by weight of each fuel oil

shipment, where a “shipment” is considered delivery of the entire amount of each order of fuel purchased. Fuel sampling and analysis may be performed by the owner or operator, an outside laboratory, or a fuel supplier. All records pertaining to the sampling of each shipment of fuel oil, including the results of the sulfur content analysis, must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. SO<sub>2</sub> emissions resulting from combustion of bark shall be determined by using the following site-specific curve equation, which accounts for the SO<sub>2</sub> scrubbing capabilities of bark combustion:

$$Y = 0.4005 * X - 0.2645$$

Where:

Y= pounds of sulfur emitted per ton of dry fuel feed to the boiler.

X= pounds of sulfur input per ton of dry bark.

(B) The owner or operator must confirm the site-specific curve equation through stack testing. By October 27, 2017, the owner or operator must provide a report to EPA showing confirmation of the site specific-curve equation accuracy. Records of the quantity of fuel input to the boiler for each fuel type for each day must be compiled no later than 15 days after the end of the month and must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. Each boiler-operating-day of the 30-day rolling average for the boiler must be determined by adding together the pounds of SO<sub>2</sub> from that boiler-operating-day and the preceding 29 boiler-operating-days and dividing the total pounds of SO<sub>2</sub> by the sum of the total number of boiler operating days (i.e., 30). The result shall be the 30 boiler-operating-day rolling average in terms of lb/day emissions of SO<sub>2</sub>. Records of the total SO<sub>2</sub> emitted for each day must be compiled no later than 15 days after the end of the month and must be maintained by the owner or operator and made available upon request to EPA and ADEQ



representatives. Records of the 30 boiler-operating-day rolling averages for SO<sub>2</sub> as described in this paragraph (c)(15)(i) must be maintained by the owner or operator for each boiler-operating-day and made available upon request to EPA and ADEQ representatives.

(ii) If the air permit is revised such that Power Boiler No. 1 is permitted to burn only pipeline quality natural gas, this is sufficient to demonstrate that the boiler is complying with the SO<sub>2</sub> emission limit under paragraph (c)(13) of this section. The compliance determination requirements and the reporting and recordkeeping requirements under paragraph (c)(15)(i) of this section would not apply and confirmation of the accuracy of the site-specific curve equation under paragraph (c)(15)(i)(B) of this section through stack testing would not be required so long as Power Boiler No. 1 is only permitted to burn pipeline quality natural gas.

(iii) To demonstrate compliance with the NO<sub>x</sub> emission limit under paragraph (c)(13) of this section, the owner or operator shall conduct stack testing using EPA Reference Method 7E, found at 40 CFR part 60, appendix A, once every 5 years, beginning October 27, 2017. Records and reports pertaining to the stack testing must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives.

(iv) If the air permit is revised such that Power Boiler No. 1 is permitted to burn only pipeline quality natural gas, the owner or operator may demonstrate compliance with the NO<sub>x</sub> emission limit under paragraph (c)(13) of this section by calculating NO<sub>x</sub> emissions using fuel usage records and the applicable NO<sub>x</sub> emission factor under AP-42, Compilation of Air Pollutant Emission Factors, section 1.4, Table 1.4-1. Records of the quantity of natural gas input to the boiler for each day must be compiled no later than 15 days after the end of the month and must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. Records of the calculation of NO<sub>x</sub> emissions for each day must be compiled no

later than 15 days after the end of the month and must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. Each boiler-operating-day of the 30-day rolling average for the boiler must be determined by adding together the pounds of NO<sub>x</sub> from that day and the preceding 29 boiler-operating-days and dividing the total pounds of NO<sub>x</sub> by the sum of the total number of hours during the same 30 boiler-operating-day period. The result shall be the 30 boiler-operating-day rolling average in terms of lb/hr emissions of NO<sub>x</sub>. Records of the 30 boiler-operating-day rolling average for NO<sub>x</sub> must be maintained by the owner or operator for each boiler-operating-day and made available upon request to EPA and ADEQ representatives. Under these circumstances, the compliance determination requirements and the reporting and recordkeeping requirements under paragraph (c)(15)(iii) of this section would not apply.

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(17) *SO<sub>2</sub> and NO<sub>x</sub> Compliance dates for Domtar Ashdown Mill Power Boiler No. 2.* The owner or operator of the boiler must comply with the SO<sub>2</sub> and NO<sub>x</sub> emission limits listed in paragraph (c)(16) of this section by October 27, 2021.

(18) *SO<sub>2</sub> and NO<sub>x</sub> Compliance determination and reporting and recordkeeping requirements for Domtar Ashdown Mill Power Boiler No. 2.* (i) NO<sub>x</sub> and SO<sub>2</sub> emissions for each day shall be determined by summing the hourly emissions measured in pounds of NO<sub>x</sub> or pounds of SO<sub>2</sub>. Each boiler-operating-day of the 30-day rolling average for the boiler shall be determined by adding together the pounds of NO<sub>x</sub> or SO<sub>2</sub> from that day and the preceding 29 boiler-operating-days and dividing the total pounds of NO<sub>x</sub> or SO<sub>2</sub> by the sum of the total number of hours during the same 30 boiler-operating-day period. The result shall be the 30 boiler-operating-day rolling average in terms of lb/hr emissions of NO<sub>x</sub> or SO<sub>2</sub>. If a valid NO<sub>x</sub>

pounds per hour or SO<sub>2</sub> pounds per hour is not available for any hour for the boiler, that NO<sub>x</sub> pounds per hour shall not be used in the calculation of the 30 boiler-operating-day rolling average for NO<sub>x</sub>. For each day, records of the total SO<sub>2</sub> and NO<sub>x</sub> emitted for that day by the boiler must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. Records of the 30 boiler-operating-day rolling average for SO<sub>2</sub> and NO<sub>x</sub> for the boiler as described in this paragraph (c)(18)(i) must be maintained by the owner or operator for each boiler-operating-day and made available upon request to EPA and ADEQ representatives.

(ii) The owner or operator shall continue to maintain and operate a CEMS for SO<sub>2</sub> and NO<sub>x</sub> on the boiler listed in paragraph (c)(16) of this section in accordance with 40 CFR 60.8 and 60.13(e), (f), and (h), and appendix B of 40 CFR part 60. The owner or operator shall comply with the quality assurance procedures for CEMS found in 40 CFR part 60. Compliance with the emission limits for SO<sub>2</sub> and NO<sub>x</sub> shall be determined by using data from a CEMS.

(iii) Continuous emissions monitoring shall apply during all periods of operation of the boiler listed in paragraph (c)(16) of this section, including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments. Continuous monitoring systems for measuring SO<sub>2</sub> and NO<sub>x</sub> and diluent gas shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Hourly averages shall be computed using at least one data point in each fifteen-minute quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant in an hour) if data are unavailable as a result of performance of calibration, quality assurance, preventive maintenance activities, or backups of

data from data acquisition and handling system, and recertification events. When valid SO<sub>2</sub> or NO<sub>x</sub> pounds per hour emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments, emission data must be obtained by using other monitoring systems approved by the EPA to provide emission data for a minimum of 18 hours in each 24-hour period and at least 22 out of 30 successive boiler operating days.

(iv) If the air permit is revised such that Power Boiler No. 2 is permitted to burn only pipeline quality natural gas, this is sufficient to demonstrate that the boiler is complying with the SO<sub>2</sub> emission limit under paragraph (c)(16) of this section. Under these circumstances, the compliance determination requirements under paragraphs (c)(18)(i) through (iii) of this section would not apply to the SO<sub>2</sub> emission limit listed in paragraph (c)(16) of this section.

(v) If the air permit is revised such that Power Boiler No. 2 is permitted to burn only pipeline quality natural gas and the operation of the CEMS is not required under other applicable requirements, the owner or operator may demonstrate compliance with the NO<sub>x</sub> emission limit under paragraph (c)(16) of this section by calculating NO<sub>x</sub> emissions using fuel usage records and the applicable NO<sub>x</sub> emission factor under AP-42, Compilation of Air Pollutant Emission Factors, section 1.4, Table 1.4-1. Records of the quantity of natural gas input to the boiler for each day must be compiled no later than 15 days after the end of the month and must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. Records of the calculation of NO<sub>x</sub> emissions for each day must be compiled no later than 15 days after the end of the month and must be maintained and made available upon request to EPA and ADEQ representatives. Each boiler-operating-day of the 30-day rolling average for the boiler must be determined by adding together the pounds of NO<sub>x</sub> from that day

and the preceding 29 boiler-operating-days and dividing the total pounds of NO<sub>x</sub> by the sum of the total number of hours during the same 30 boiler-operating-day period. The result shall be the 30 boiler-operating-day rolling average in terms of lb/hr emissions of NO<sub>x</sub>. Records of the 30 boiler-operating-day rolling average for NO<sub>x</sub> must be maintained by the owner or operator for each boiler-operating-day and made available upon request to EPA and ADEQ representatives. Under these circumstances, the compliance determination requirements under paragraphs (c)(18)(i) through (iii) of this section would not apply to the NO<sub>x</sub> emission limit.

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(20) *PM compliance dates for Domtar Ashdown Mill Power Boiler No. 2.* The owner or operator of the boiler must comply with the PM BART requirement listed in paragraph (c)(19) of this section by November 28, 2016.

(21) *Alternative PM Compliance Determination for Domtar Ashdown Paper Mill Power Boiler No.2.* If the air permit is revised such that Power Boiler No. 2 is permitted to burn only pipeline quality natural gas, this is sufficient to demonstrate that the boiler is complying with the PM BART requirement under paragraph (c)(19) of this section.

(22) *Emissions limitations for Entergy Independence Units 1 and 2.* The individual emission limits for each unit are as listed in the table in this paragraph (c)(22) in pounds per million British thermal units (lb/MMBtu). The SO<sub>2</sub> emission limits listed in the table as lb/MMBtu are on a rolling 30 boiler-operating-day averaging period.

Unit	SO <sub>2</sub> Emission limit (lb/MMBtu)
Entergy Independence Unit 1	0.06
Entergy Independence Unit 2	0.06

(23) *Compliance dates for Entergy Independence Units 1 and 2.* The owner or operator of each unit must comply with the SO<sub>2</sub> emission limits in paragraph (c)(22) of this section by October 27, 2021.

(24) *Compliance determination and reporting and recordkeeping requirements for Entergy Independence Units 1 and 2.* (i) For purposes of determining compliance with the SO<sub>2</sub> emissions limit listed in paragraph (c)(22) of this section for each unit, the SO<sub>2</sub> emissions for each boiler-operating-day shall be determined by summing the hourly emissions measured in pounds of SO<sub>2</sub>. For each unit, heat input for each boiler-operating-day shall be determined by adding together all hourly heat inputs, in millions of BTU. Each boiler-operating-day of the thirty-day rolling average for a unit shall be determined by adding together the pounds of SO<sub>2</sub> from that day and the preceding 29 boiler-operating-days and dividing the total pounds of SO<sub>2</sub> by the sum of the heat input during the same 30 boiler-operating-day period. The result shall be the 30 boiler-operating-day rolling average in terms of lb/MMBtu emissions of SO<sub>2</sub>. If a valid SO<sub>2</sub> pounds per hour or heat input is not available for any hour for a unit, that heat input and SO<sub>2</sub> pounds per hour shall not be used in the calculation of the applicable 30 boiler-operating-days rolling average. For each day, records of the total SO<sub>2</sub> emitted that day by each emission unit and the sum of the hourly heat inputs for that day must be maintained by the owner or operator and made available upon request to EPA and ADEQ representatives. Records of the 30 boiler-operating-day rolling average for each unit as described in this paragraph (c)(24)(i) must be maintained by the owner or operator for each boiler-operating-day and made available upon request to EPA and ADEQ representatives.

(ii) The owner or operator shall continue to maintain and operate a CEMS for SO<sub>2</sub> on the units listed in paragraph (c)(22) in accordance with 40 CFR 60.8 and 60.13(e), (f), and (h), and

appendix B of 40 CFR part 60. The owner or operator shall comply with the quality assurance procedures for CEMS found in 40 CFR part 75. Compliance with the emission limits for SO<sub>2</sub> shall be determined by using data from a CEMS.

(iii) Continuous emissions monitoring shall apply during all periods of operation of the units listed in paragraph (c)(22) of this section, including periods of startup, shutdown, and malfunction, except for CEMS breakdowns, repairs, calibration checks, and zero and span adjustments. Continuous monitoring systems for measuring SO<sub>2</sub> and diluent gas shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Hourly averages shall be computed using at least one data point in each fifteen-minute quadrant of an hour. Notwithstanding this requirement, an hourly average may be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant in an hour) if data are unavailable as a result of performance of calibration, quality assurance, preventive maintenance activities, or backups of data from data acquisition and handling system, and recertification events. When valid SO<sub>2</sub> pounds per hour emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks, or zero and span adjustments, emission data must be obtained by using other monitoring systems approved by the EPA to provide emission data for a minimum of 18 hours in each 24-hour period and at least 22 out of 30 successive boiler operating days.

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